

<b>Portland Pipe Line Corporation</b>	)	<b>Department</b>
<b>Cumberland County</b>	)	<b>Findings of Fact and Order</b>
<b>South Portland, Maine</b>	)	<b>Part 70 Air Emission License</b>
<b>A-197-70-B-M</b>	)	<b>Minor Revision</b>

After review of the Part 70 License minor revision application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

## **I. Registration**

### **A. Introduction**

FACILITY	Portland Pipe Line Corporation (PPLC)
LICENSE NUMBER	A-197-70-B-M
LICENSE TYPE	Part 70 Minor Revision License
SIC CODES	5171
NATURE OF BUSINESS	Crude petroleum storage facility
FACILITY LOCATION	30 Hill Street South Portland
DATE OF INITIAL LICENSE ISSUANCE	December 8, 1998
DATE OF MINOR REVISION ISSUANCE	September 6, 2000
LICENSE EXPIRATION DATE	December 8, 2003

### **B. Application Classification**

The application for Portland Pipe Line Corporation does not involve a modification and does not involve a relaxation or substantial change in monitoring, testing, reporting or recordkeeping requirements. The application addresses numerical corrections and clarifies emission calculation procedures required by the facility's Air Emission License; therefore, this application is being processed as a minor revision to the Part 70 License issued under Chapter 140 of the Department's regulations for a Part 70 source.

## **II. MINOR REVISION DESCRIPTION**

- A. PPLC has requested a minor revision to re-clarify their facility's potential to emit (PTE) VOCs, based on the calculation method required in their Title V Air Emission License. When PPLC submitted their Title V application, API Publication method 2517 was used to estimate PTE VOC emissions from the facility's crude oil storage tanks, and facility emissions were estimated to be 94.7 TPY, based on a maximum annual throughput of 11.0 billion gallons of crude oil

per year. In order to demonstrate compliance with this annual average VOC emission limit, PPLC is required to calculate and record annual VOC emissions from the crude oil tanks. Condition 25(C)(6) in PPLC's Air Emission License specifies that VOC emissions are to be determined in accordance with the American Petroleum Institute, Manual Petroleum Measurement Standard (MPMS), Chapter 19, Section 2, Evaporative Loss from Floating Roof Tanks (API Chapter 19.2). After PPLC's Title V license was effective, PPLC recalculated their emissions using API's Chapter 19.2 method and discovered the Chapter 19.2 method resulted in a greater PTE for VOC emissions than method 2517.

The air emission license also requires PPLC to maintain records showing average annual information for the crude oil storage tanks in order to calculate VOC emissions, including Reid vapor pressure (RVP), maximum true vapor pressure, and average stock storage temperature.

Reid vapor pressure has been identified as a significant variable in calculating VOC emissions using method 19.2. The crude oils that PPLC handles can vary significantly from year to year. PPLC does not have control over the type of crude oil it receives from tankers and transports to refineries. As a result, VOC emission estimates can vary significantly. PPLC estimated annual emissions using an average annual RVP of 11.1 psia. Applying API Chapter 19.2 methodology to 11.0 billion gallons of 11.1 RVP crude oil, PPLC's potential annual VOC emissions are approximately 220 TPY, rather than 94.7 TPY calculated using method 2517.

In addition, this minor revision clarifies how Reid vapor pressure is applied in API Chapter 19.2 methodology. The Department requests that PPLC use the throughput-weighted average RVP for the facility in VOC emission estimates; Special Condition (27)A.2.b. has been changed to reflect this requirement.

Temperature is an important input into the emission estimate calculations in API Chapter 19.2. Table 2 of Chapter 19.2 states that, with respect to temperature, the input is to be "user specified" or taken from Tables 15 or 16. If the temperature input is to be user specified, then the temperature must be the liquid surface temperature. PPLC's tank temperature monitors are located in the middle of the tanks. Since PPLC does not monitor liquid surface temperature, the default values in Tables 15 and 16 must be used. This minor revision clarifies that default temperatures can be used. The default temperature is determined by taking the average annual stock storage temperature as determined using the average annual ambient temperature and tank paint color and using Tables 15 and 16. This minor revision corrects Special Condition (25) C.4. and Special Condition (27)A.2.d. to reflect the use of a default temperature.

Condition (27) A.2.c. which requires records of maximum true vapor pressure has been removed, since maximum true vapor pressure is not required for performing emission calculations with API Chapter 19.2 methodology. The Department has required the use of a throughput-weighted average RVP for the facility in VOC emission estimates.

This minor revision does not result in a change in actual emissions, only a clarification in facility PTE based on the calculation method required in the facility's Title V air emission license. State Enforceable Only, Condition (25)F, which limits facility VOC emission to 94.7 TPY, is removed from the air emission license since this limit is not reflective of actual facility emissions based on API Chapter 19.2 methodology. Changes in recordkeeping requirements reflect clarifications necessary to appropriately use API Chapter 19.2 methodology to calculate estimated annual VOC emissions.

This minor revision replaces Standard Condition (19) with the revised Condition (19) in Chapter 140 of the Department's regulations. Standard Condition (19) was revised to clarify that 40 CFR Part 70 only requires a summary of periodic monitoring and deviations on a semiannual basis, as opposed to a quarterly basis.

This minor revision also clarifies the intent of Special Condition (31) in air emission license A-197-70-A-I. The existing license condition states that all documents submitted to the Bureau of Air Quality must be signed by a responsible official. The condition has been replaced to clarify that only reports are required to be signed by a responsible official, as required by 40 CFR Part 70. The Bureau of Air Quality did not intend to require all letters and correspondence to be signed by a responsible official.

#### B. Facility Emissions

##### **Total Annual Emissions for the Facility** (used to calculate the license fee)

<b>Pollutant</b>	<b>Tons/Year</b>
PM	0.42
PM <sub>10</sub>	0.42
SO <sub>2</sub>	1.8
NO <sub>x</sub>	1.3
CO	0.13
VOC	220

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## **ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License minor revision A-197-70-B-M, subject to the following conditions:

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only.**

### **STANDARD CONDITIONS**

**The following condition replaces Condition (19) in Air Emission License A-197-70-A-I:**

- (19) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.

### **SPECIAL CONDITIONS**

**The following condition replaces Condition (25) C.4. in air emission license A-197-70-A-I:**

- (25) C.4. The average annual stock storage temperature as determined using the average annual ambient temperature and tank paint color using Tables 15 and 16 of API MPMS Chapter 19.2 and weighted average Reid vapor pressure based on facility-wide annual throughputs of volatile petroleum liquids stored.

**Condition (25) F. in Air Emission License A-197-70-A-I is void and of no effect.**

**The following condition replaces Condition (27)A.2.b. in Air Emission License A-197-70-A-I:**

- (27)A.2.b. Weighted-average Reid vapor pressure based on facility-wide annual throughputs.

**Condition (27) A.2.c. in Air Emission License A-197-70-A-I is void and of no effect.**

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**The following condition replaces Condition (27)A.2.d. in Air Emission License A-197-70-A-I:**

(27)A.2.d. Average stock storage temperature as determined using the average annual ambient temperature and tank paint color using Tables 15 and 16 of API MPMS Chapter 19.2.

**The following condition replaces Condition (31) in air emission license A-197-70-A-I:**

- (31) **Certification by a Responsible Official**  
All reports (including semiannual reports and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [MEDEP Chapter 140]
- (33) This amendment shall expire concurrently with air emission license A-197-70-A-I.

DONE AND DATED IN AUGUSTA, MAINE THIS        DAY OF        2000.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: July 26, 2000  
Date of application acceptance: July 26, 2000

Date filed with the Board of Environmental Protection \_\_\_\_\_

This Order prepared by Sarah Anderson, Bureau of Air Quality.